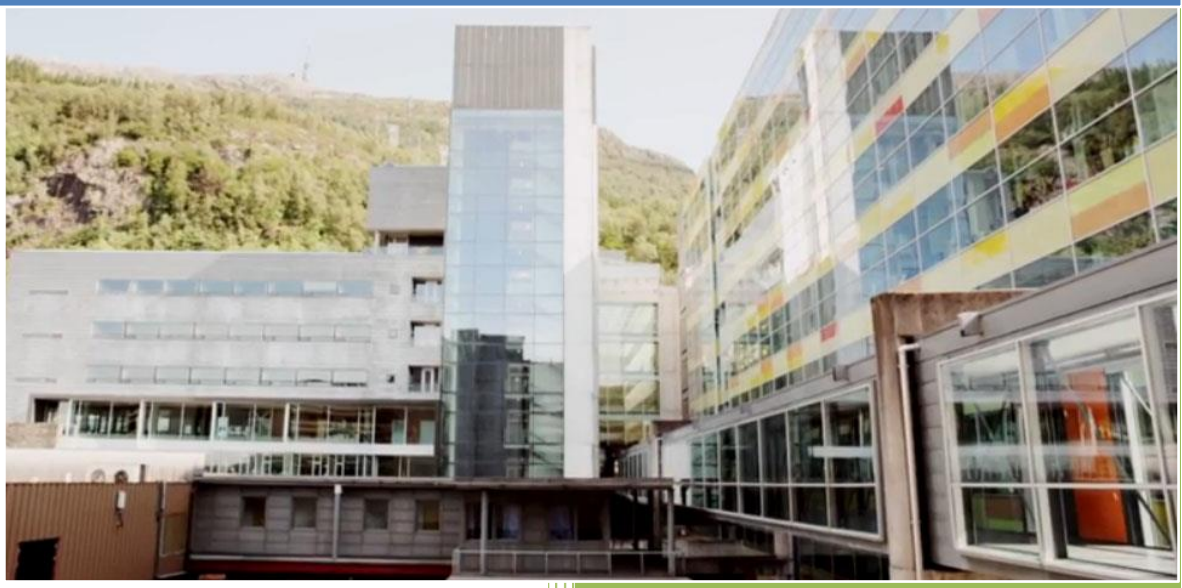
2023

HSE Manual for Laboratories at Department of Clinical Medicine (K1)



Update February 2023

Content

Welcome as an employee at The Department of Clinical Medicine (K1)

Quality in research and education is a complex concept and has many aspects. For K1, it is of paramount importance that we actively develop all these aspects. Health, safety, and the work environment are key concepts for this quality. In laboratory work, accuracy and tidiness are an absolute requirement. Protocols should be followed. Without precision, the results are not to be trusted. HSE (Health, Safety and Environment) must always be built into the procedures.

Satisfactory HSE (Health, Safety and Environment) routines firstly mean that procedures and guidelines exist, secondly that they are easily accessible and known by everyone they are intended for, and finally that they are followed in detail. An HSE book is meant as an aid for all three elements. However, no matter how good and easily accessible the HSE guidelines are, each person has a responsibility to follow them. The responsibility and control mechanisms on which we depend in patient care, must similarly apply to research projects, and not least to projects that may entail health-, environmental or safety risks.

Read the guidelines in this book, feel free to suggest improvement, and follow all the guidelines. Take responsibility both for yourself and for your employees, good routines are contagious. At K1, the HSE focus should be high among all employees.

Head of Department

Who the manual applies to

The content and guidelines of the manual apply to:

- Employees at the Department of Clinical Medicine, K1 in all job categories, students and others who use equipment and instruments related to activity at the department.
- All employees are obliged to familiarize themselves with relevant routines.

The manual's rules/guidelines apply to all laboratory areas connected to K1.

- Keycards are not handed out until the individual user can document with signature that the training plan has been reviewed by the person in charge.

The purpose of the manual

The manual is an aid in facilitating access to information about rules/ guidelines/ work routines etc. to ensure and improve the working environment, and:

- to promote communication between the employees and clarify responsibilities (line management)
- to promote quality assurance in HSE work
- to ensure the physical working environment
- to focus on HSE work in the laboratory
- to protect against health and environmental damage
- to protect the external environment from pollution by proper waste treatment

Everyone with a working relationship at K1 should familiarize themselves with the contents of the manual.

The responsibility for this lies with the head of the department, who delegates HSE tasks to the head of the research group.

LEVELS OF RESPONSIBILITY

Head of Department delegates responsibility

According to the University and College Act, the head of department is responsible for the working environment at the department. Delegated authority may be granted to other personnel such as head of administration and research group leaders. Research group leaders are project managers for PhD candidates/students and other researchers working at the laboratories.

Supervisors and research group leaders

All supervisors are responsible for their students and staff in the laboratory. They must ensure that they receive information about various risk factors when working in the laboratory and ensure that necessary training is given in general laboratory safety, work routines and the use of instruments.

The research group leader is responsible for ensuring that written work routines adapted to the individual work assignment are available and shall be responsible for training their staff in routines that will ensure that the work is carried out without danger to the employee's health and safety, and without harm to the environment. The individual employee is responsible for ensuring that the work routines are followed. There shall be a concise work instruction that must be presented upon inspection.

The individual employee is responsible for keeping a lab notebook. The lab notebook must be presented on request by the research group leader.

See the following page: Risk assessment related to HSE and emergency preparedness

Nonconformities and personal injuries

Nonconformities (ex: deviations from laboratory rules) must be reported to the nearest superior, possibly to the head of department or safety representative and in UiBhjelp. The procedure for claims can be found in the HSE portal: Report HSE nonconformities | HSE portal | UiB

In addition, personal injuries must always be reported to the head of administration. This is then forwarded with concrete proposals for improvement to the HSE section centrally at UiB.

For safety reasons, children under the age of 12 should not be taken to the laboratory areas.

UiB's HSE portal

The university's website has a lot of relevant information in its HSE portal.

The role of the safety delegate at the department

The safety delegate has been chosen by work colleagues to safeguard their interests in environmental work issues. The safety delegate must keep a watchful eye on the working environment and has the right to raise issues with the head of the department.

The safety delegate has the authority to stop dangerous work.

The safety delegate shall participate in regular safety inspections, at least once a year, together with the head of the research group/managing director or HSE coordinator. The safety inspection is concluded by documenting a list of actions needed.

The safety delegate must be informed of the planning of changes that may affect the staff's work situation and shall have an advisory role during the planning and implementation of measures that are important for the department's working environment. The names of safety delegates and deputy safety delegates shall be listed, and information posted in each lab.

Safety delegate period 2023-2024:

Health and Safety Representative (HSR) technical staff: Solrun Steine

Deputy HSR Technical Staff: Unni Larsen

Health and Safety Representative at The Animal Department, all job categories: Beate Kluge

Deputy HSR at The Animal Department, all job categories: Helen Eikeseth Otterå

Health and Safety Representative administrative and scientific positions: Mareike Mannigel

Deputy HSR administrative and scientific positions: Siri Sagen Trosvik

Chief Health and Safety Officer at the Medical faculty: Lise Skålvik Amble

GENERAL HSE GUIDELINES

See the HSE department's guidelines for laboratories, workshops, and clinics.

A general tour at the premises is given to new students and staff who start at the department by the research group leader or lab manager. Students and staff are encouraged to ask questions (if anything is unclear).

When working in a laboratory, one is generally exposed to various forms of risk, such as chemicals, samples from patients and infected material. This means that work must be carried out in a sensible manner in accordance with the rules discussed in this booklet.

In the event of problems in the laboratory, this is addressed with the immediate manager in charge and resolved within the group. Problems that cannot be solved internally are forwarded preferably to the head of administration and/or the health and safety representative.

For reporting of accidents, near misses and nonconformities, see the chapter on notification.

Shared responsibility

Everyone is responsible for keeping all workplaces clean and in order.

The workplace should be left ready for use by others when one is not present. The laboratory bench and equipment must be cleaned after every use and put back in place. Eventual spills on any surfaces such as

benches, scales, etc. must be dealt with immediately, dried with absorbing paper and washed with water and soap if necessary.

HEALTH:

Vaccine

Everyone who works regularly with biological material should be vaccinated with hepatitis B-vaccine.

If you are going to work with tuberculosis, a lung examination and possibly thorax X-ray should have been carried out before start-up. If you don't have a BCG vaccine, you must get this.

If you are going to work with laboratory animals, you must have a tetanus vaccine and revaccination is recommended every 10 years.

Each individual contacts the HSE section to get the vaccines. Read more about vaccine here.

Health follow-up re: allergy

If you are going to work with **laboratory animals**, you must be listed with the HSE department's health checks for monitoring allergy development. The first check should take place ***before*** starting to work with the animals. Read more here.

Contact information for the HSE section:

Phone: (47) 55 58 20 54

E-mail: post@hms.uib.no

Website: HSE portal | University of Bergen (uib.no)

Visiting address: Christiesgate 20. (Entrance from Muséplass).

Postal address: P.O. Box 7800, 5020 Bergen.

VARIOUS ROUTINES

Biohazard – Biological hazard

Injunctions/prohibitions applicable to all areas marked with Biohazard signs:

- The doors of the area should be closed.
- Food and drink are prohibited in the laboratory
- Wear goggles if applicable
- Suitable protective clothing and suitable protective gloves must be worn where required.
- Solutions/buffers/chemicals that are not in the original packaging must be marked with Name, date, concentration, initials
- Always wipe up spills following the laboratory rules for spills
- Maintain good hand hygiene

Disinfection methods

Chemical disinfection:

- 70% ethanol for disinfection of skin and equipment and by contamination of bacteria or virus.
- Chlorhexidine or Pyrisept for disinfection of skin and cuts.
- Hypochlorite (e.g., Chlorine) for disinfection of equipment.
- Virkon for disinfection of non-autoclavable equipment that is used for bacteria and virus.

Autoclaving

Follow the program of the individual autoclave.

UV light

UV-light is used for disinfection of e.g., work benches as well as for the destruction of DNA/RNA. Do not keep UV-light on during work!

10 min irradiation with UV-light on a surface is usually sufficient to kill all microorganisms. If the UV-light has been switched on overnight, it is recommended that it should be switched off approx. half an hour before the laboratory is accessed (to vent ozone).

Consumables and reagents

Infected glassware and solutions/media should be sterilized by autoclaving.

Everyone is responsible for ensuring that the glassware they use is cleaned and put back in place according to the routines that apply to the laboratory they work in.

The same applies to equipment and solutions that are to be autoclaved or disinfected in other ways.

NB! Fill up common buffers, reagents, sterile glassware, pipettes when empty so that it is ready for the next user.

Wearing gloves

The use of gloves must have a clear purpose.

Use the correct glove for the purpose, check the MSDS (Material Safety Data Sheet) on which gloves to use.

Avoid skin contact with hazardous substances such as compounds that can induce injury or illness and wear protective gloves of a material that has a documented protective effect.

- Protect yourself from the transmission of infectious agents from biological material
- Protect the samples from contamination from you.
- Change gloves if necessary, and always take them off when leaving the place of work, so that you do not transfer infection, chemicals, or anything else to "clean" areas (phones, door handles, common areas, etc.).

Sting and cut injuries

Rinse cuts immediately for 5 minutes with plenty of running water. In case of eye contamination use the eye shower placed by the sink. If the skin is contaminated with infectious material, skin-disinfectant should be used for 3 – 4 minutes.

In case of cut/stab wounds with risk of blood-borne infections, immediately contact the on-call infectious disease specialist at Haukeland University Hospital on 05300.

First aid by risk of blood borne infection

Definition: Blood borne infections are infections that are transmitted via blood, blood products, body fluids or tissue fluids. The method of infection is inoculation, transfusion or contact between infectious fluid and tissues and mucous membranes. Blood infection does not occur through intact and undamaged skin. If the source of infection is positive for hepatitis B, rapid vaccination of unvaccinated staff is mandatory. All unvaccinated personnel as well as vaccinated personnel with low levels of hepatitis B antibodies should also receive hepatitis B immunoglobulin. In these cases, the HSE Centre may request vaccines and Hepatitis B immunoglobulin from the Norwegian Institute of Public Health on a blue prescription. (Reference: HUS's HSE pages)

The hospital's list of action in case of risk of blood infection:

1. Take first aid measures.
2. Contact the infectious disease section's on-call doctor (24-hour shift) pager 9-3720 or via switchboard.
3. The risk is assessed by the infectious disease section's on-call doctor or occasionally by another doctor.
4. If chemoprophylaxis is indicated, medication must be initiated to prevent cases of infectious disease. The first doses can be obtained from Medicine post 6, phone 3720.
5. Take a blood sample from the source of infection if you have his/her consent.
6. Take a blood sample from the exposed person.
7. Fill out the injury report for the HSE service. Also fill in the non-conformity report.
8. Establish follow-up in the medical outpatient clinic.

Procedure for stings and cut injuries: See SOP for immediate measures and follow-up of stings and cut injuries in case of risk of exposure to biological factors.

Emergency equipment

Each lab should have the appropriate emergency equipment in relation to the type of work that is done in the relevant laboratory. Familiarize yourself with the location of the equipment.

A box of emergency equipment may include:

- Face shield
- Full face mask for protection against gas and particles.
- Filters for masks, 2pcs
- Fire damage blanket
- Safety spectacles
- Hearing protectors
- Rubber boots,chemical resistant, 2 sets, ladies, and men's sizes
- Gloves 4H, withstands most chemicals.
- Absorption mat or other absorption material for chemicals

Instruction for use is on the inside of the lid of the box.

Chemicals

Important when handling chemicals:

- No return of substance to original packaging
- Keep packaging closed!
- Bottles should not be carried by the neck or close to your body — use bucket or trolley table
- When tilting, the label should face up
- Are you going to work alone? Consider risk!

Working with chemicals

All chemicals must be stored in assigned chemical rooms or chemical cabinets. Chemicals with the following properties are placed in separate cabinets: acids, bases, flammables, toxic and dyes.

When working with chemicals, it is important to have knowledge about the chemicals and their effect on health and the environment so that they can be used in a proper way. Chemicals represent danger depending on their properties and the extent of the exposure.

Work with hazardous substances (see Eco online) should take place in fume hoods. The fume hoods should not be used for storage space. The fume hood must be checked annually by the HSE section.

Work with chemicals is regulated in the Chemicals Regulations. Follow the regulations for handling hazardous substances.
Everyone who works in the laboratory must be familiar with the EcoOnline system and with "HMS-portalen" UiB which can be found on UiB's Employee pages.

Here you can read about dangers, protective measures, risk evaluations, HSE data sheet, training, handling, storage, disposal, guidelines, and regulations using chemicals.
When purchasing new chemicals, such information must be obtained from suppliers, EcoOnline and optionally from "HMS-portalen".
If you want to "borrow" chemicals, please ask the owners first. Work in fume hood with dangerous and bad-smelling liquids. Solvents should only be used in fume hoods!

Wear protective equipment such as gloves, face masks, glasses, screens, lead apron, warning signs when necessary. Wear gloves with care. Do not touch door handles, telephones, etc. until the gloves are removed. Do not wear gloves in an office or living room. Wear a face mask when weighing hazardous and volatile substances or use a weighing bench with ventilation. Goggles/protective mask/special gloves may be required in conjunction with the use of some chemicals or liquid nitrogen/dry ice.
Check data sheets.

If alternative chemicals are present, **the substitution rule** must **be applied.**

EcoOnline, Chemical Manager

Digital archive for chemicals. All chemicals purchased must be registered in EcoOnline.
Login EcoOnline, Chemical manager: HSE portal | University of Bergen (uib.no)

Super user EcoOnline:

Eye Department: Unni Larsen Neuro: Hanne Linda Nakkestad

EcoOnline coordinator: May Britt Kalvenes, senior engineer at the Department of Pathology.

READ THE DATA SHEET BEFORE MANAGING A CHEMICAL.

Updated version of the individual chemicals can be obtained from EcoOnline, Chemical Manager.
HUS is responsible for UiB employees when performing work at HUS locations. See "Working Environment Act" §2-2. This also applies when it comes to chemical registration in EcoOnline. The requirement is that UiB employees shall have complete access to data sheets and risk assessment where they work.

This means that UiB employees working in hospital laboratories must have complete access to data sheets and risk assessment where they work. UiB employees should be familiar with the risk assessment that has been made on the individual chemical they are working with. They must be given access to the EcoOnline archive for the laboratory they are working in, even if this is located under Helse-Vest. Similarly, all employees working in UiB laboratories must have equivalent reading access and knowledge of the UiB laboratory's EcoOnline archive.

See "Regulations relating to the Performance of Work", Chapter 2 Drug Index

Working with liquid nitrogen

The room should be equipped with oxygen monitor. An alarm will sound if nitrogen gas displaces the oxygen in the surrounding air. Leave the room immediately!

Face shield and sturdy, loose-fitting gloves should be used when filling nitrogen and when removing tubes from the nitrogen tank. Use shoes, not sandals.
When picking up tubes from the nitrogen tank, immediately unscrew the lid a little to relieve any pressure caused by the nitrogen in the tube. Transport the tubes in a closed polystyrene box. It is only the first few minutes after the tubes are removed from the nitrogen tank that there is a risk of explosion.

Transport of nitrogen: Leave the nitrogen tanks alone in the elevator, as there is a risk of suffocation. Mark the tank during transport.

Working with radioactive material

Work with tritium, thymidine and beta radiation are conducted in areas of the laboratories marked with yellow and black brand tape for radioactivity.

Other radioactive work will take place in the isotope labs.

Isotope labs are reserved for **radioactive work, and** you must have approved training **before working with isotopes.**
Information about radiation and radiation protection can be found here.

Working with genetically modified organisms (GMOs)

Resource person/contact person GMOs at K1: Aurora Brønstad, Animal Department.

For work with GMOs, we must comply with the Gene Technology Act and its regulations, which require notifications/approvals of both projects and laboratory facilities. The Act also sets requirements for how the work is carried out.

New guidelines for biological risk factors and guidelines for genetically modified organisms can be found in UiB's rules collection. They are available in Norwegian and English.

Below is a description of how to relate to work with genetically modified microorganisms (GMM) in the laboratory (so-called contained use). Transport of GMM between laboratory units is also discussed. Working with GMM in combination with animals or working with other types of GMOs (such as plants, animals) is also discussed here. It is important to note that not all molecular biological work is covered by the Gene Technology Act. This only apply when introducing the genes into an organism that can multiply. For example, the isolation of DNA or performing PCR will not be affected by the law.
Genetically modified microorganisms are divided into **risk class 1-4.**

Class 1: activities that do not involve risk or negligible risk, i.e., activities where containment measures at enclosure level 1 are appropriate to protect the health and environment of humans and animals.

Class 2: activities that involve minor risk, i.e., activities where containment measures at containment level 2 are appropriate to protect human and animal health and the environment.

Class 3: activities that involve moderate risk, i.e., activities where containment measures at enclosure level 3 are appropriate to protect the health and environment of humans and animals.

Class 4: activities that involve significant risk, i.e., activities where containment measures at enclosure level 4 are appropriate to protect the health and environment of humans and animals.

For the daily work in the laboratory, there are four things to deal with:

a) That laboratories and facilities are approved for work with GMOs. This will usually be submitted for joint applications. At K1, there are approved laboratories to work with GMM up to and including containment level 2. Premises for which approval is available will/shall be marked with yellow signs stating this.
b) That there is notification/approval for the work you are performing. The manager of the project in question shall be responsible for this. The project manager is also responsible for ensuring that those working on the project are informed that the work includes GMM and what precautions and work routines this entails. In the notification/approval, there shall be a pre-assessment of the enclosed use with regards to the risk of disease/injury to people, animals, plants, or the environment that this use may entail.
c) That the work is conducted in a safe manner correctly (see below)
d) That a record of the work is kept and can be presented in the event of an inspection.

For all activities involving GMM, the principles of good microbiological practice and the following principles apply to good safety and hygiene in the workplace.

Measures required by law when using GMM:

Emission prevention: GMM shall be inactivated using recognized methods in all waste and discharges, including wastewater. If necessary, investigate whether viable organisms occur outside the primary physical confinement. Combustion, autoclaving or other disinfection methods as described on page 14 must be used here.

Antibiotic resistance genes should be treated so that these genes are destroyed, for example, by fragmentation before discharge to the environment. Combustion will be a safe method to achieve this, but autoclaving (larger volumes) causes such genes to be biologically inactivated to a very large extent.

Transport: For GMM of risk classes 1 and 2, transport and import (shipments) up to ten liters can take place without special approval if the regulatory requirements for labelling and packaging are met, but such transport must be protocolled.

Transport of GMM in higher risk classes, and more than ten liters of GMM of risk class 2, will require more comprehensive approval and is not discussed here.

Transport between different approved units/facilities must be carried out in a way that minimizes the likelihood of accidents/spills. For example, containers containing GMM should be transported on trolley tables that have high edges that can capture the amount of liquid and thus limit spillage.

Reporting of accidents: In the event of serious accidents/discharges, the supervisory authority shall be notified immediately (Norwegian Directorate of Health, Department of Biotechnology and Health Law tel. **+47 24 16 39 00).** The following information must be provided: 1) the circumstances of the accident, 2) the identity and amount of GMM released, 3) all information necessary to assess the effects of the accident on health and the environment, 4) what measures have been taken.

The reporting should go through the project manager or team leader.

Relevant definitions:

Genetically modified organisms
Genetically modified organisms are defined as microorganisms, plants, and animals in which the genetic composition is changed using gene or cell technology.

Microorganisms
Microorganisms are defined as any cellular or noncellular microbiological organism capable of multiplying or transmitting genetic material. Definition of microorganisms includes viruses, bacteria, single-celled plants and animals, plants- and animal cells (including human cells) in culture and microscopic yeast and mold fungus. The definition does not cover plasmids or other DNA outside the cell.

Contained use
Contained use means any work operation in which genetically modified organisms are produced, cultivated, stored, destroyed, or otherwise used, in a closed system where physical barriers are used alone or together with chemical or biological barriers, to limit the organism's contact with humans and the environment.
The transport of genetically modified organisms between approved laboratories within the same institution, for example, different laboratories within a university campus are also considered contained use.

Release

Release: any production and use of genetically modified organisms not considered *contained use*.

Documentation of applications for the use of GMOs and GMMs must be available upon request.

Inquiries to the Committee for Biosecurity at UiB: UiB Help, select the "Get Help" tab.

Waste disposal

University employees working in areas owned by Helse Bergen must follow their guidelines for handling waste.

In the waste rooms/laundry rooms there should be cardboard cartons, extra bottoms for the cartons, red plastic bags, string/strips, and labels. Mark the cardboard boxes with the correct label. When 3/4 full, close the cartons and place them in the waste room.

For work in the laboratory, the following labels are often used:

- **Cytostatics**: Smaller amounts of cytostatics, antibiotics, substances that are carcinogenic, mutagenic, toxic, harmful to health or environmentally harmful are discarded, as well as disposable equipment used for this work. (Cartons are frozen to -20 °C in the Environmental Hall and then driven to Rådal for combustion at 900-1000°C)

- **Test tubes/ agar plates:** Infectious waste such as used agar plates and test tubes containing blood or tissue fluids. As well as disposables and gloves that may contain residues or have been in contact with organic sample material. Small volume chemicals, as well as 10 l tank with liquid from cell lab added Virkon. (Cartons are frozen to -20 °C in the Environmental Hall and then driven to Rådal by combustion at 900-1000°C)
- **Infection:** Infectious waste containing blood or tissue fluids. No chemicals, and no more liquid than 500 ml. (The cartons are autoclaved in the Environmental Hall, and then driven to Rådal for combustion at 450-500°C)

- **Sting/cut**: In these cartons, yellow plastic boxes with lids containing syringe tips, scalpel blades, object glass and sting/cut objects are placed. Such yellow plastic boxes are purchased by the individual research groups. (The cartons are autoclaved in the Environmental Hall and then driven to Rådal for combustion at 450-500 °C)

- **Pathological waste:** large amounts of tissues and animal carcasses

- **Plastic waste:** a) Hard plastic: Plastic packaging/plastic jugs

  b) Soft plastic: Only soft, glossy and white plastic

- **Styrofoam:** Only styrofoam, not similar plastic products.

- **Paper:** a) Blue paper container: paper with personal data, office paper, labels. All paper here is shredded!

  b) Grey paper containers: Newspapers, magazines, brochures, journals.

- **Residual waste:** Any waste that does not fall into the other waste categories.

There are also waste containers for **Glass waste**: Only clean bottles/glass, and for **Cardboard.**

Bacterial waste:

In cultivation of bacteria, contaminated flasks/media are autoclaved. Fill some water in the flasks if they are empty. This will facilitate the cleaning afterwards.

Immediately dry up with absorbent paper to be destructed by combustion, spillage of material containing genetically modified or other living microorganism. The area should be disinfected by 70% ethanol or treated with Virkon/chloramine. During work, use gloves and possibly other suitable protection.
If the area cannot be disinfected immediately, seal off the space that may be contaminated to avoid infection/contamination to people. Start disinfection (70% ethanol or disinfectant). Record the biological factor and report to superior (group leader and safety representative).

Poster for Chemical spills in a common chemical room/ waste room: See Appendix 1

Chemicals are special waste!

Check the data sheet for how to handle the chemical you use.
Mark the bottle:

- Name of chemical(s). Use data sheet or attachment for identification if these chemicals if they cannot be identified on the original bottle.
- Supplier
- Chemical formula if possible.

NB: Avoid mixing different substances. Use a new **bottle instead!**

Separate regulations in common rooms for radioactive work, isotope laboratory:
http://www.lovdata.no/for/sf/ho/xo-20101029-1380.html

The waste will be transported to the Environmental Hall, Haukeland University Hospital for destruction by procedures determined by the hospital.

Handling of hazardous waste

The waste management follows Helse Bergen's procedures.

Waste producer: department/unit that owns/manufactures the waste.

Hazardous waste: Waste that cannot be appropriately handled together with other household or industrial waste because it can cause serious contamination or risk of injury to humans or animals.

Hazardous waste in Helse Bergen: Chemicals, EE waste and radioactive waste.

Responsibility:

- All hazardous waste must be handled and packed in accordance with laws and regulations.
- The waste must be packed safely so that transport damage does not occur, e.g., use shock-absorbing material between glass bottles.
- The waste is placed in:
  - Lab building: Room 1170
  - Old main buildings, Neuro: waste room
  - Eye building: Own waste room

- Central block: Separate container rooms on each floor

Packaging for waste:

Red waste bin: Hazardous waste must be packed in original packaging or other well-marked packaging and marked with declaration number.

Glossy plastic jug: Solvents without halogen, which cannot be discarded in original packaging, must be in a blank jug and marked with a declaration number.

Blue plastic jug: Solvents with halogen, which cannot go in original packaging should be in blue jug and marked with declaration number.

For Lab building: red boxes and plastic jugs can be obtained by contacting the porters **tel. +47 77898.** They are located on floor 1M by the goods receipt (lift East).

In the Central Block: Call the Environmental Hall. They are delivering to the department.

An internal declaration form for hazardous waste and radioactive waste must be completed to the Environmental Hall.

A form is filled in for each waste material number. The waste is marked with the **declaration number** in the upper right corner of the form. See Appendix 2.

Note that **UN numbers** may be marked as FN **numbers.**

Packaging group: There are three packaging groups:

- I – Very hazardous substances
- II – Medium hazardous substances
- III – Less hazardous substances

Pregnancy

When an employee is pregnant, the employer is obliged to ensure that the worker is not exposed to harmful influences by providing the necessary arrangements or arrange for relocation.
Form: Form for facilitation and relocation during pregnancy (arbeidstilsynet.no)
If you are planning a pregnancy, or are pregnant, assess your work for any harmful influence. Discuss this with your leader as soon as possible. Perhaps for a period you can change your work with isotopes, cytostatic or other chemicals that may be harmful to the fetus and that may feel unsafe to work with. Perhaps other people can perform the risky tasks for you in a period.

We refer to info at http://www.arbeidstilsynet.no
«Graviditet or arbeidsmiljø» (Only in Norwegian) for further reading/advice.

K1'S LABORATORIES, CORE FACILITY AND CONTACT PERSONS

Laboratory	Localization	Contact
Nephro	Seventh floor. Lab.building	Omnia Shadad
Surgical Research Lab	Seventh floor. Lab.building	Gry Hilde Nilsen
Biomaterials	Seventh floor. Lab.building	Paul Johan Høl
MedViz	Seventh floor. Lab.building	Odd Helge Gilja
Eye	Eye building	Unni Larsen
Neurological research lab	Old Main Buildings	Hanne Linda Nakkestad
Pathology	Central Block	May Britt Kalvenes
CCBIO	Central Block	Ingeborg Winge

In addition, we have the core facility Animal Facility. The animal department has its own HSE handbook with special routines for its activities. The Head of the Animal Department Aurora Brønstad is responsible. More information about the Animal Department can be found at http://www.uib.no/fg/dyreavdelingen

NOTIFICATION

Notification of accidents, near-accidents, and deviations

All accidents, near misses and deviations must be reported. Guidelines and forms can be found at UiB's HMS-portal: Report HSE nonconformities

Deviations, e.g., equipment that does not work, repeated violations of routines or rules of order, and other, must be reported to the immediate superior, and if necessary, reported to the safety delegate and the head of administration.

Notification in case of emergencies

The safety page provides preventive training and advice on what to do in an emergency:

Employees or students who discover an emergency should immediately notify:

Hospital	Emergency	Hotline
Department of security: 559 72222 Fire on the hospital grounds: 559 72004 Accident/Acute illness: 559 73333	Fire: 110 Police: 112 Ambulance: 113	UiB 55 58 85 00 (24/7)

Notification of bullying/harassment

Guidelines for the prevention and management of bullying and harassment — The rules collection documentation (uib.no)

Fire instructions

Familiarize yourself with the following:

- Escape routes and meeting place.
- Nearest manual fire alarm.
- Nearest fire hose/extinguisher.
- See fire instructions/evacuation plan and escape plan

Fire/Evacuation plan

If you notice fire or smoke:

- Trigger the manual fire alarm
- Briefly describe the event to Department of Security (Phone: 559 72222).
- Consider measures you can take yourself
- Start evacuation, use designated escape routes
- The fire officer (carry a yellow vest) will distribute any work task

The following messages will be given over the speaker **system:**

- Minor alarm: "*An automatic fire alert is being investigated.* Wait for more *information".* Measure: The fire officer will investigate whether there is a fire or smoke development on the floor. When this is detected, the manual alarm is triggered. Other employees are awaiting the situation.
- Major alarm: " A fire *has been set off. Leave the building through the nearest exit or* emergency *exit. Do* not use the elevator". Measure: Fire officers will share tasks depending on the current situation and will consider the measures that can be taken to extinguish the fire, rescue, and evacuation. Staff are responsible that patients and visitors use established escape routes to get to the meeting point outside the building.
- When the danger is over, the following message is played over the speaker system: *"The situation is under control. We apologize for the disturbance, and everyone is welcome back inside".*

Meeting point.

- **Familiarize yourself with which escape route to use. WHICH ESCAPE ROUTE YOU MUST CHOOSE DEPEND ON YOUR LOCATION IN THE BUILDING/FLOOR – CHOOSE THE NEAREST!**

Return to the workplace:

- It is not allowed to return to the workplace until it has been decided that the situation is under control, either over the speaker system or by a representative of The Safety Department.

An evacuation plan is posted on each floor. All employees are obliged to familiarize themselves with these.

ROUTINES FOR EACH LAB IN PARTICULAR

Gade's laboratory for pathology and the Eye Department

See a booklet for the laboratories that will be handed over by the departments at start-up.

Useful links

HMS-portalen: http://www.uib.no/poa/hms-portalen

Health, environment and safety: http://www.uib.no/hms/handbok/kapittel5/k5_1.html

ECO Online, Chemical Manager: Log in with Feide

The rules collection at UiB: Rules collection | Employee pages | UiB

ATTACHMENT

Snu dette arket ved kjemikaliesøl!

Strakstiltak ved kjemikaliesøl:

- Forlat rommet
- Snu dette arket
- Ring sikkerhetsavdelingen: **5597 2222**

Melder sitt ansvar videre:

- Melder skal, sammen med sikkerhetsavdelingen (eventuelt andre på sin avdeling med kjemikaliekunnskap) avgjøre om dette er noe vi kan håndtere selv, eller om brannvesenet skal kontaktes.
- Ved behov for verneutstyr henter melder dette fra egen avdeling
- Husk å melde hendelsen i avdelingen sitt avvikssystem
- Husk å snu arket igjen når rommet er klarert

OBS rom 1170!

Kjemikalierom nr. 1170 har to dører (en ute, som brukes ved henting av risikoavfall). Ta med ett eksemplar av plakaten og heng på døren ute.

ADVARSEL!

Kjemikaliesøl

INGEN ADGANG!

Nødnummer Hospitaldrift sikkerhet:

5597 2222

Melder: Før på fullt navn, avdeling og dato for hendelse: